ABSTRACT OF THE DISCLOSURE

In a synchronous reluctance motor having a rotor having a plurality of pairs of an outer side slot formed at an outer periphery side and an inner side slot formed at inner side of the rotor. The distance between the outer periphery of the rotor and the outer side slot is determined to be the width of the stator magnetic pole portion of the stator multiplied by 0.7 to 1.3. A first total magnetic flux amount of an outer side permanent magnet disposed in the outer side slot is determined to be larger than or equal to a second total magnetic flux amount of an inner side permanent magnet disposed in the inner side slot.